BUSINESS REVIEW

JULY
1957

THE PORT OF BOSTON: 1957

The problems of the Port of Boston have become so widely known that they are commonly regarded as symbolic of the economic ills of New England — if not actually responsible for many of those ills. Yet since about 1950 the port has made considerable progress in putting its affairs in order. It now stands on the threshold of new developments which may greatly advance its interests.

The port's physical facilities have been completely renovated. At the close of World War II, almost all piers needed major repair and some were obsolete. Today, almost all general-cargo-handling facilities have been rebuilt or remodeled. Some work (at Commonwealth Pier, for example) is still in progress but is scheduled for completion before the close of 1957.

The newly-created Massachusetts Port Authority is expected soon to assume responsibility for the port's affairs. For the first time, the port will be supervised by a public body with adequate power and autonomy.

Action by the railroads and port agencies to remove the port's rail rate disadvantage as compared with Philadelphia and Baltimore has finally begun. The rail rates that a midwest shipper must pay to export or import via Boston are normally 2¢

(Continued on page 2)

Also

Characteristics of New Manufacturing Enterprises
Part II — The Founders, page 5.

The New England Governors' Committee on Public Transportation has just released its report on the region's ocean transportation service. Readers interested in a more detailed account of Boston's position than is included in this article may obtain a copy of this report (Report No. 8, Water Transportation Policy for New England) by writing to the Committee's Executive Director, 1137 Statler Building, Boston, Mass.

A subsequent issue of this *Review* will contain an article discussing the situation of New England ports other than Boston.

per hundred pounds higher than Philadelphia rates and 3¢ higher than Baltimore rates. These differentials first emerged before World War I, at a time when shipments via Boston enjoyed lower ocean transport rates. The effect of the rail differential was to produce approximate equality in the total shipping bill, regardless of the port. But shortly after the war, the steamship conferences removed the ocean differential. In two strokes, Boston's advantage was thus converted to a disadvantage.

The beginning of action to remove the rate differential is not the same thing as removing it. A long, hard-fought struggle before the Interstate Commerce Commission and no doubt the federal courts is in prospect. Yet Boston has more grounds for optimism on this score than she has had for many years.

Still another development, the formation of the World Trade Center in New England, points toward an increase in the region's foreign trade. Any such increase brings the prospect of an increased flow of tonnage through the port of Boston.

Against these hopeful developments must be set the fact that total tonnages handled at Boston have not increased significantly since 1950. A review of the changes in tonnage may indicate some of the difficulties which still stand in the way of growth.

The four accompanying charts show import and export tonnages at Boston, New York, Philadelphia and Baltimore from 1924 to 1954, measured on a "ratio" scale.[1] In each case a "trend" line has been computed and plotted, of such a nature as to indicate a constant annual rate of growth or decline over the thirty-year period involved. These percentages are shown on each chart. At least two interesting facts emerge from consideration of these charts.

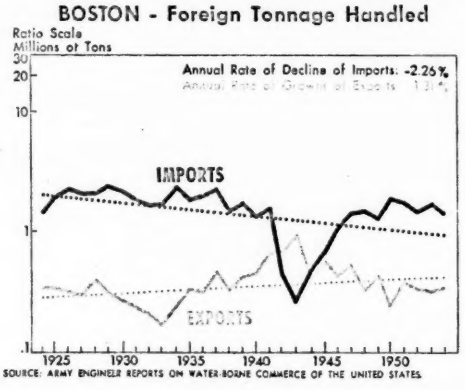
The first fact is that trends at New York and Boston are very similar. The thirty-year trend in both instances indicates a slight decline in imports and an even smaller increase in exports. (Boston's rate of import decline is larger, but it is influenced by a sharp drop during World War II which had no counterpart at New York.) The postwar trend, in both instances, shows just the reverse: imports growing slightly, exports tending to decline.

Contrary to popular impression, then, Boston has not been losing ground in recent years relative to New York. Of course, New York today handles eight tons of cargo for every ton at Boston. But that relationship, or a comparable one, has prevailed for two generations or more.

In the early 1920's, Boston's total tonnage, and also the foreign component thereof, was a little more than 10 per cent of New York levels. Figures from around 1900 and from the 1870's, of necessity less complete, indicate very much the same relationship. There may have been a time when Boston's port handled tonnage on a level comparable with New York, but it would be far back in history.

There have been two areas in which the port of Boston has suffered a true absolute decline. The first is in export business. For the most part, the drop occurred during a period earlier than that indicated by the accompanying charts. In the early 1900's, Boston's exports approximately matched her imports in value, and probably in volume. The ratio began to drop well before World War I, as the result of an absolute fall in exports. By the early 1920's, Boston was sending abroad only one ton for every eight imported (a ratio which, however, had been influenced by an increase in petroleum imports).

This export drop corresponds with the change



1 Petroleum tonnages are deducted from import totals, and coal and coke from the export totals. These fuels, which bulk extremely large in the tonnage figures, are specialized bulk cargoes bearing no relation to general cargo traffic. The remaining tonnages as plotted can be considered a rough measure of the level of general cargo traffic—no more than rough, since many less important bulk cargo items still remain therein. Military cargo transported in commercial ships is included, but not that carried in Department of Defense vessels.

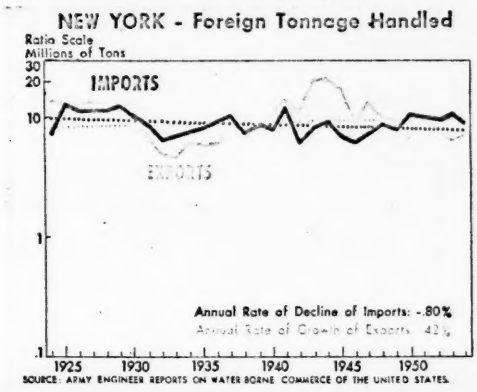
in the export advantage position of the United States. It is likely that the flow of grain, cereals and meat which left Boston's piers in heavy volume before World War I was not diverted to other ports. Rather, it simply dried up as the nation's export advantage swung from agricultural to manufactured goods. To maintain her outgoing traffic, Boston would have had to share in the new export business; and this she failed to do.

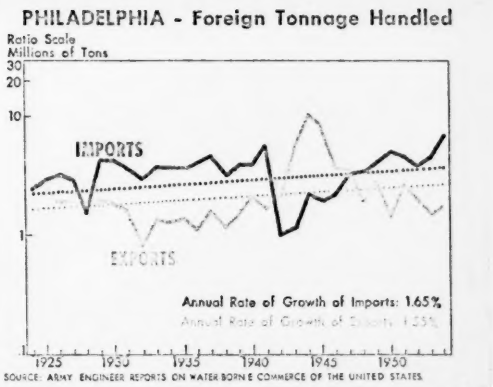
The second area of decline has been in coastal business. Before and after World War I, coastal carriers moved each year literally millions of tons of general cargo along the East Coast, or between East and West Coasts. This volume began to drop in the 1930's. World War II interrupted service. In the postwar period, most carriers either did not resume operations at all or did so for only a brief period. The business had been lost to rail and highway carriers, and prospects of regaining it were not encouraging. Today, although intercoastal general cargo service has been maintained to some extent, coastal tonnage is extremely small. In the total tonnage figures, this decline is concealed by a compensating rise in coastal bulk cargo movements (fuels and raw materials). Bulk cargoes are usually handled at private terminals and at extremely low cost per ton. They cannot compensate a port for the loss of general cargo business.

All ports have suffered from the decline in coastal general cargo traffic, but the loss has been far from evenly distributed. Boston has been one of the heaviest losers. Seventy-five per cent of her 1920 tonnage was coastwise. At New York, the figure was about thirty-five per cent.

Conceivably, an alert port agency might have secured new export business for Boston at the time of decline in her agricultural staples. But no amount of solicitation could possibly have brought the coastwise business back.

Such considerations are necessary if Boston's affairs are to be seen in perspective. But they





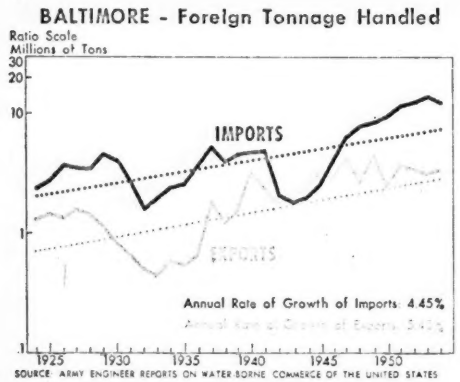
are not meant to imply that, all things considered, the port's record has been fully satisfactory. As the charts indicate, Philadelphia and Baltimore (especially the latter) have managed to increase their foreign tonnage over the same thirty-year period.

But this reveals a further interesting fact: rates of growth exactly match the present import-export rail rate relationship. Baltimore, with its 3¢ advantage, shows much the highest growth rate, both as to imports and exports. Philadelphia, with a 2¢ advantage, has grown, but much more slowly. Boston and New York, with the same rates, have each just about held their own.

It would be most unwise to try to attribute these percentages solely to the rail rate relationship, for much of the tonnage counted was not in any way involved with midwest territory. But it would be equally unwise to try to argue that the differential rates have had no part to play in the determination of these growth percentages.

What are the present prospects for an increase in tonnage handled at Boston? Where is the business to come from?

In December 1956, in cooperation with the New England Industrial Traffic League, the Federal Reserve Bank of Boston queried the larger New England shippers regarding their use of water transportation and of the port of Boston. Approximately 120 usable responses were received from some 200 questionnaires mailed. Eighty-three and one-half per cent of those replying indicated that they made at least some use of water transport for outgoing shipments; but almost half of these respondents made no use of Boston at all. "Lack of service" or "service too infrequent" explained non-use of Boston by a margin of about seven to one over all other reasons cited. As to incoming shipments, only about 38½ per cent made direct use of water transport. All but a few of these receivers made at least some use of Boston. Infrequency of service was again the reason most commonly cited



for not making greater use of the port.

In 1955, incoming cargoes at Boston exceeded outgoing by about 3 tons to 1, even after subtraction of the very heavy volume of inbound fuel tonnage. Whatever the historical explanation for decline in exports may have been, one simple fact explains much of the present deficiency in outgoing tonnage, relative to incoming. A steamship delivering and taking aboard cargo at United States ports will customarily make about three calls—say at Boston, New York and Philadelphia — or occasionally more. The first port of call inbound has an advantage with respect to incoming cargo bound for midwest territory. The goods can be unloaded and on their way several days before the vessel reaches its second port. But an exporter has no incentive to send outgoing goods through this first port—say Boston—if the same ship is to make a final call at New York ten days later (unless he happens to be situated very close to Boston). Today, Boston is very frequently the first port of call, and much less frequently the last port. Until and unless shipping companies can be persuaded to institute more last-port service, exports via Boston will continue to lag.

The task of developing a new service is much like trying to fit together all the parts of a jigsaw puzzle at the same time. Several parties are involved in the transport of freight: the shipper, one or more railroads or motor carriers, perhaps a freight forwarder, and a steamship company. To enlist the cooperation of any one of these parties in the establishment of new service may be difficult enough. But to institute that service, they must all be persuaded at about the same time. Inability or unwillingness of any one to support a particular routing is sufficient to veto that route. The shipper will not send his freight in the absence of steamship service. The steamship company wants assurance of sufficient volume to justify that service. The support of inland carriers is needed to solicit cargo and to carry the goods from shipper to port. New England, as has so often been pointed out, lacks the long-haul railroad needed for this purpose. The difficulty of starting new services explains the tremendous inertia supporting the position of any established port which handles cargo in large volume.

Comparatively little import tonnage appears to move to midwest territory via Boston. Hence it appears that Boston has not as yet succeeded in exploiting to the full her first-port-of-call position. Logic suggests that such an expansion in import tonnage would be considerably easier to accomplish than an export increase. This would enhance the prevailing import-export imbalance. But tonnage is tonnage. There is no reason for the port to spurn cargo simply because of the direction in which it happens to be headed. If vessels actually called only at a single North Atlantic port, then a balance in tonnage would be needed so as to match outgoing loads with incoming. So long as they call at several ports, the situation is quite different.

The real argument for undertaking the more difficult task of expanded export service is this: the shortcomings of existing service force many New England exporters to ship through New York and other ports, in the majority of instances at higher inland shipping cost. In total, New England's exports are insufficient of themselves to maintain adequate outgoing service via Boston. They must be supplemented by a flow of goods from territory to the west if New England is to enjoy minimum-cost export shipping service. That is a task facing the new Massachusetts Port Authority. It is by no means an easy one.

NEW PUBLICATION AVAILABLE

New England Economic Almanac **— A comprehensive statistical handbook of state and regional facts, presenting current and historical data about New England's resources, its population, agriculture, employment, manufacturing, construction, trade, transportation and communications, finance, income and taxes. Available upon request from the Public Information Department, Federal Reserve Bank of Boston.**

Characteristics of New Manufacturing Enterprises

PART II — THE FOUNDERS

Who are the founders of new manufacturing firms? Why do they found them? What are the greatest handicaps to the successful growth of their firms? What can bankers and others do to help them? These questions are important not only to the man who hopes to found his own firm but to all who have an interest in free enterprise and economic growth.

The key element in the initial success of a new firm is its founder. In the typical case the founder or founders do the initial planning, obtain and direct installation of equipment, supervise the initial manufacturing operations, and make the first sales. After that, while their roles vary, they usually do the selling, handle business details, and inspect or otherwise supervise output. Many of the owners who are skilled craftsmen also work in the shop.

No man can be an expert in all these matters. Yet the mail questionnaire and interview study of manufacturers on which this discussion is based (see note) revealed that 70 per cent of new firms are founded by one man. Even when there is more than one founder, there are usually important aspects of running the business in which they have had no experience. Knowing the backgrounds and problems of these founders clarifies the kinds of assistance they need.

Backgrounds of Founders

New England's existing industries are the training ground for the founders of most of her new firms. All but a few founders had lived in Connecticut for at least one year and 56 per cent had lived there more than 20 years.

Several characteristics distinguish the founders of these firms from other Connecticut males of the same age. One is that before establishing the firms in this study, 90 per cent owned their own businesses, were production workers through the rank of foreman, or were in a group hereafter referred to, for the sake of brevity, as "administrators." These persons held jobs as executives, administrators, engineers and salesmen. Relative to others of their age, five times as many founders were business owners, two and one-half times as many were "administrators," and one and one-tenth as many were production workers.

The median values for characteristics of founders, given in the accompanying chart, show that the average founder had lived in Connecticut 25 years and was better educated and held a better-paying and higher-status job than the average Connecticut male of his age. At the same time founders came from a wide variety of backgrounds and the data on previous occupations, incomes and initial capital investment suggest that, if he is willing to work long enough and hard enough, none of these things need prevent anyone from establishing a manufacturing firm. However, capital and experience are advantages making success easier to attain.

The founders fulfilling the American dream are those who had not owned other firms but were moving from employee to owner status. Forty-nine per cent of those not previously owners had held jobs as "administrators" and 41 per cent had been production workers. Most of the 33 per cent of all founders who previously owned businesses had also once been employed as production workers or administrators.

The previous accomplishments of the founders indicate they are fairly capable people. Both the production-worker and administrator founders earned substantially more than the average for their occupations. Furthermore, 80 per cent of those not the sons of business owners had previously achieved an occupational status higher than or as high as their fathers.

The desires of these men to have their own firms may be partially due to ambitions and standards for success learned as children. Twenty-eight per cent of the fathers of administrators and 13 per cent of the fathers of production

Note

This article summarizes a study, *The Entry of New Firms into Manufacturing in Connecticut, 1945-1954*, presented to the faculty of the Graduate School of Yale University as a doctoral thesis by Gilbert T. Brown. The project was made possible by research grants from The Connecticut Bank and Trust Company and the Federal Reserve Bank of Boston. The Connecticut Development Commission provided names of Connecticut's new firms.

Part I, dealing with the new firms, appeared in the June issue of the *Business Review*.

Eleven hundred new firms established in Connecticut during the 1945-54 period were operating in the summer of 1955. Five hundred forty-five founders of 501 of these firms replied to a mail questionnaire asking for personal information and details as to the size and products of their businesses. The founders of a five per cent random sample of all 1,100 firms were selected for interviewing.

workers owned their own businesses. Another 31 per cent of the fathers of administrators and 11 per cent of the fathers of production workers were business executives and managers or professional men.

Why They Founded Firms

Human motives are sufficiently complex and hard to identify, even for the person feeling them, that conclusions about why somebody has done something must be presented with some reservations. However, the answers of the interviewed founders to the question of why they had established their firm seem to be an adequate basis for drawing several conclusions.

The primary motives of nearly all founders seem to have been either to make more money, to be their own bosses, or both. The prospect of a higher income was the most important motive for one-half to two-thirds of the founders, although other factors were frequently mentioned. The desire to have their own firms was sufficiently strong that some persons would have founded—and in some cases did found—firms without the incentive of a rise in income.

The importance of the prospect of a higher income seems to have been related to previous incomes and to the size of the expected increase. The prospect of a higher income was the primary incentive for all those earning less than $4,000 a year. The more he was earning before founding the firm, the less likely that the founder established it primarily to increase his income. Those with the lowest incomes for whom money had not been an important incentive were generally younger men who could reasonably expect substantially higher salaries in a few years.

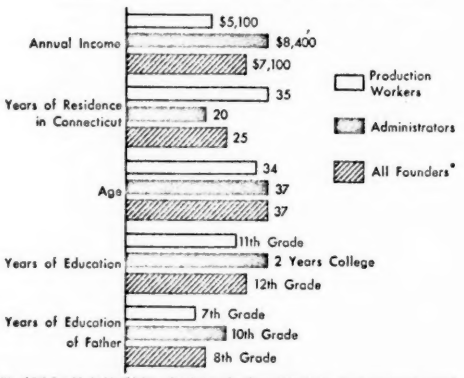
Despite this general trend, two of the wealthiest men interviewed said that they founded their firms solely to earn more money. Both thought they could greatly increase their incomes and the size of the expected increase probably explains its importance.

Reasons other than prospective income were more important for about one-third of the founders. Most of them felt that they could get a greater sense of accomplishment and satisfaction by having their own firms. Some felt that they would have a better life for other reasons.

Several had a desire to produce a new product or to do things more efficiently than their employers. For example, the chief engineer of a national concern established his firm to take on a development contract which his employer had turned down. He wanted both to develop the product, which promises to be a major addition to the field of business machines, and to escape

CHARACTERISTICS OF FOUNDERS

Median Values at Time They Formed Firms



* IN ADDITION TO PRODUCTION WORKERS AND ADMINISTRATORS, THIS INCLUDES THOSE IN OTHER OCCUPATIONS AND THOSE WHO PREVIOUSLY OWNED FIRMS

the frustrations of the large corporation. A mill superintendent who disagreed with accepted equipment and maintenance policy in his industry but could not convince his management, set up his own firm and has proved his point.

The operation of their own business gave some a sense of pride and accomplishment they could not get as employees. In their own businesses they had enough of a hand in everything to get a strong sense of personal accomplishment from the success of the firm. Their previous discontent may have reflected their standards for personal achievement. While the numbers involved are too few for percentages to indicate more than rough magnitude, it is striking that over 60 per cent of these people were the sons of business owners. Another was the son of a top executive and one was a minister's son.

When founders were asked what characteristics distinguished persons who founded firms from those who remained employees, half of those for whom income had not been the primary motivation said that "independence" was a characteristic of founders, while none of those for whom money had been the chief incentive mentioned it. Most of the references to founders as persons seeking achievement and personal satisfaction were also made by those to whom income had not been a primary incentive.

For many founders both the desire to earn more money and the desire to be their own boss were important. Many for whom money was an important incentive were also chafing to try out ideas or escape from the ubiquitous "boss." A number spoke of how nice it was to make your own decisions, not to have to answer to someone else, and to set your own work schedule. Well over half the founders mentioned the desire to

be their own boss as a reason for founding their firm and one-fourth said that a sense of satisfaction and accomplishment from their work had been a factor.

Problems of New Firms

The problems that loom largest for particular firms vary both with their products and markets and with the experience and resources of the founders. But lack of know-how in the non-production aspects of business operations is the greatest stumbling block for most new firms.

About 80 per cent of the firms had an owner or employee who was an experienced production man. Two-thirds of the founders had either owned a similar firm or been engineers, plant superintendents or skilled production workers. This background explains why most new firms are readily able to solve their production problems. When extensive know-how is not available, their ingenuity and determination to succeed usually lead to a solution.

A number of founders—both experienced and not experienced in production—felt that knowing how to produce the product was the least important aspect of successfully operating a business. They also felt that production know-how could be hired. But they emphasized that it was both difficult to locate a well-rounded person to handle all aspects of the business and unwise to turn over too much of the business operation to someone else. Also the range of non-production problems is so great that no one man can be well versed in all of them. Even founders with considerable business experience had to deal for the first time with problems of finance or sales or other aspects of business. Yet most small firms cannot afford, and do not have full-time need for, a battery of specialists.

Non-production problems were often serious and not easy to correct. One of the most common problems was underestimating need for working capital. After sinking a substantial part of their capital into plant and equipment, firms would find themselves in a very tight squeeze when they learned that it was customary in their industries for the customer to pay one, three, or six months later.

Few had previously discussed their credit needs with bankers and suppliers. Some found themselves in serious trouble when they tried to grow faster than their capital permitted. Many production-trained founders had to learn the basic techniques for running an office, keeping records, and matching cash out-flows with in-flows. Two firms lost most of their working capital through customer bankruptcies before they learned how easily and quickly they could get credit evaluations on potential customers. Some new firms paid higher than necessary prices for supplies because they did not know market prices or practices regarding bargaining and discounts. Others did not know how to submit bids to potential customers or did not know the customs determining what constituted the making of an agreement.

Several founders stated that they did not want their firms to continue to grow because they were not sure they knew how to successfully guide a larger operation. This may also be one of the reasons why firms founded by administrators grew faster than those founded by production workers. The average firm founded by persons with either background began with three employees. At the time of the survey, the median production-worker-founded firm had grown to only six employees while the median size administrator-founded firm then had 15 employees.

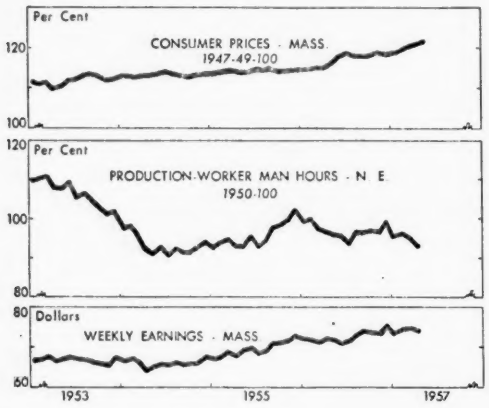
What Can Be Done?

Where can potential founders and other business men get information about working capital needs, business practices, and other problems? All persons that have such information and all relevant written material are potential sources. But in most communities bank loan officers are the best general source of such information. The banker's experience with many businesses gives him an excellent perspective on business needs and problems and how to meet them. He also has a direct financial interest in other people's problems because bank profits depend upon having customers who are making profits in an economically healthy community.

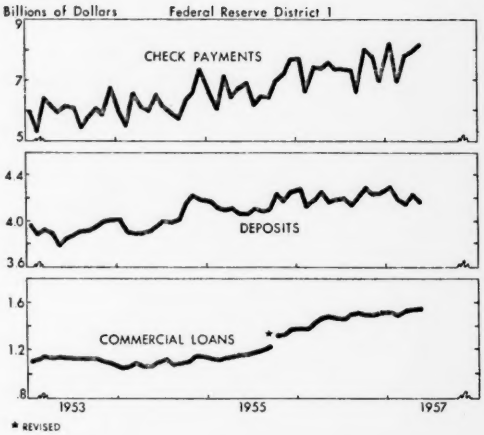
If needed information is available, why do not more founders take advantage of it? The majority of those interviewed had not discussed their plans with a banker, even though many would have profited handsomely from doing so. Some did not realize that they had problems until they were in serious financial trouble. The others often seemed to feel that the banks were not particularly interested in them and would probably not loan them money.

Such attitudes suggest that each bank would do well to see if it is making an adequate effort to make the public aware of its desire to talk over business plans and problems with potential business founders and the very small firm. Industrial development agencies, chambers of commerce, and all who know people planning or operating new or small firms can help such persons by recommending that they talk their problems over with a banker.

PRICES, MAN-HOURS, AND EARNINGS



BANKING



* REVISED

MANUFACTURING INDEXES (seasonally adjusted)	MASSACHUSETTS (1950–52 = 100)			NEW ENGLAND (1950–52 = 100)			UNITED STATES (1947–49 = 100)		
		Per Cent Change from:			Per Cent Change from:			Per Cent Change from:	
	Apr. '57	Mar. '57	Apr. '56	Apr. '57	Mar. '57	Apr. '56	Apr. '57	Mar. '57	Apr. '56
All Manufacturing	110	− 1	− 9	117	+ 1	− 6	146	− 1	+ 1
Primary Metals	105	− 4	−15	101	− 5	−21	134	− 2	− 8
Textiles	52	− 2	−29	70	− 1	−22	99	− 2	− 7
Leather	110	+ 7	−13	110	+ 8	− 7	107	0	+ 1
Paper	109	− 1	− 8	116	− 7	−13	156	− 1	− 3

	NEW ENGLAND			UNITED STATES		
		Per Cent Change from:			Per Cent Change from:	
	Apr. '57	Mar. '57	Apr. '56	Apr. '57	Mar. '57	Apr. '56
BANKING AND CREDIT						
Commercial Loans ($ millions) (Weekly Reporting Member Banks)	1,534	+ 1	+ 6	30,974	+ 1	+14
Deposits ($ millions) (Weekly Reporting Member Banks)	4,233	+ 2	0	94,187	+ 2	+ 1
Check Payments ($ millions) (Selected Cities)	7,904	+ 2	+ 8	192,492	− 2	+ 9
Consumer Installment Credit Outstanding (index, 1950–52 = 100)	219	+ 2	+10	212	+ 1	+ 7
TRADE						
Department Store Sales (index, seas. adj. 1947–49 = 100)	107	− 3	− 4	122	− 4	0
Department Store Stocks (index, seas. adj. 1947–49 = 100)	128	− 1	0	141	0	+ 4
EMPLOYMENT, PRICES, MAN-HOURS, & EARNINGS						
Nonagricultural Employment (thousands)	3,594	+ 1	+ 1	51,628	+ 1	+ 2
Insured Unemployment (thousands) (excl. R. R. and Veterans programs)	123	− 3	+19	1,480	− 8	+11
Consumer Prices (index, 1947–49 = 100)	120.6 (Mass.)	0	+ 5	119.3	0	+ 4
Production-Worker Man-Hours (index, 1950 = 100)	92.8	− 2	− 4	103.3	− 2	− 2
Weekly Earnings in Manufacturing ($)	74.05 (Mass.)	− 1	+ 4	81.80	− 1	+ 4
OTHER INDICATORS						
Construction Contract Awards ($ thousands, 3-mos. moving averages)						
Total	168,322	+29	+10	3,084,652	+15	+ 5
Residential	68,121	+21	0	1,212,071	+13	− 5
Public Works	30,682	+72	+13	547,459	+30	+21
Electrical Energy Production (index, seas. adj. 1947–49 = 100)*	180.6	− 1	0	223.5	− 3	+ 4
Business Failures (number)	65	+14	+25	1,175	−12	+19
New Business Incorporations (number)	784	+ 7	− 1	12,078	+ 2	− 3

*Figure for last week of month